



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

manent conditions are the primary or fundamental actualities in nature; and they underlie and make possible the infinite variety of materials, events, processes and developments which it presents to our observation. All of these, except possibly the most elemental realities investigated by mathematics and logic, appear as products of what we may agree to call "creative evolution." This process is also a fact, a tangible actuality in our experience. To call the novelty-producing or creative element in reality "volitional," or to ascribe to it consciousness, purpose and ethical intention, is in a sense to anthropomorphize nature; in any case it can give only a vague indication of the essential nature of the originative factors underlying development. Still, these factors, if existent in a natural product like humanity, must also be present in some form in the natural process considered as a whole. In all such speculations, however, the implications of language are misleading; and direct experience or intuition of phenomena—in active life as well as in observation and reflection—would seem to be the safest basis for sound and valid thinking. Of course by the term intuition I mean nothing mystical or indefinable, but simply direct conscious experience of the actual phenomena of life and nature, without the prejudices or preconceptions arising from the use of words or other symbols. Scientific observation or intuition (in this sense) discloses as a reality the constant or law-abiding and hence calculable element in phenomena; but superposed on this, and equally real and fundamental, is the creative element which gives nature its character as a temporal or historical process whose possibilities are never completely realized at one time, but always in process of realization. The conflict of opinion which makes metaphysics an alien and often unsympathetic field to students of the physical sciences indicates that something is still lacking in our knowledge of the essentials of reality. There must be some solution of the metaphysical problem on which all clear-sighted, honest and disinterested minds can agree.

RALPH S. LILLIE.

CLARK UNIVERSITY.

SHALL WE EXCLUDE ELEMENTARY JUDGMENTS FROM LOGIC?

IN his article, *The Logical Status of Elementary and Reflective Judgments*,¹ Professor Lodge proposes to exclude the former from modern logic. He evidently expects this modern logic to be the logic of the future, and he has himself "done his bit" towards

¹ This JOURNAL, XVII., 8, p. 214.

that result in his excellent little book, *Modern Logic*, wherein he is so distinctly modern as to ignore the syllogism. His hope is not unreasonable; traditional logic is sadly in need of revision.² Now if modern logic is thus destined to prevail, Lodge's proposal amounts to the total exclusion from logic of all spontaneous judgments. It is true he allots them a place in "the body of thought known as traditional logic," but he thereby practically consigns them to the tomb, since that logic is already moribund.

Grave issues are involved in this proposal. The mere bulk of the logical matter to be discarded is formidable, to say nothing of its intrinsic importance. The criterion proposed as a standard to which all matter retained as logical must conform, is *Beurtheilung*, critical examination. This excludes all spontaneity from logic. Such an elementary judgment as That is a cow, must be regarded with suspicion. It is not a critical judgment, not a "thought about thought." It does indeed seem to be a pretty solid fact; even Professor Lodge would admit that a cow is a fact, and would find her milk to be a satisfactory beverage. That is a cow, is one example at least of an elementary judgment which is not, as he assumes most of them are, "especially the product of animals and young children." It belongs to that very large and familiar group of judgments which may be defined as *thinking what a thing is*. We may appropriately name them *primal judgments* because the first step, a very important step too, in logical thinking, is to identify objects, to think what this thing and that thing and the other thing is. It is chiefly by means of these simple primal judgments that we and all mankind, not merely animals and young children, are able to find our way about in this world. We live on primal judgments. The philosopher as well as the peasant would be helpless without them. They constitute one of the largest and most important groups of logical elements.

But the total bulk of logical matter to be discarded is not exhausted by simple primal judgments, large and important as we find that group to be. Many *inferential* judgments must also go into the discard, because they also are spontaneous, not critical. An inference is a judgment, and very often an elementary judgment. It differs from the simple judgment only in that some factor not directly perceived is included. For instance, we *see* smoke and *infer* fire. But the thought, Yonder is fire, is a spontaneous, not a critical judgment. Lodge's criterion would exclude it from modern logic, and along with it a great many familiar inferences.

Concepts also must go. The concept is built up of elementary

² Genuine Aristotelian logic is not so very bad; later hands have spoilt it. Benedetto Croce says that while Aristotle was a philosopher his followers were mostly day laborers. That may account for the degeneration of his logic.

judgments, judgments of selection or exclusion according as this or that is judged fit or unfit to be included in it. The concept itself is an elementary judgment and must be excluded from modern logic if we accept the proposed criterion.

Where shall we stop if we begin to cut off this and that element which is usually accepted as logical? Theoretically critical thought seems to be a fairly definite criterion. But in its practical application grave difficulties confront us. We are constantly in danger of putting asunder things which nature has joined together. It will hardly be denied by any one that something is logical; logic is not a myth. Passing from this general proposition to particulars, we may safely claim that inference is logical. But critical inference merges into spontaneous inference, and inference itself shades off into judgments, and judgments into concepts. All of these logical factors are functions of cognition, and the knowledge-process is a continuous process. The attempt to break it up into a critical moiety and a spontaneous moiety is unphilosophical in principle and impossible in practise. The proposed exclusion of elementary judgments from logic ignores the continuity and solidarity of the whole compactly organized body of logical thought.

It is pertinent to inquire how much of Lodge's own book would remain if all but critical judgments were excluded. Of his four kinds of judgment the whole of the first group—perceptual judgments—would have to go. Also a great part of the second group—judgments of experience. This name, by the way, assigned to the second group, is infelicitous; all judgments are judgments of experience. Much happier is Bosanquet's descriptive phrase, "judgments of elaboration." For a judgment of this type works up, elaborates, distinct elements of thought; or, as Lodge puts it, "sums up many previous experiences." Now most of these distinct elements of thought are elementary judgments, and the process of elaboration may be either critical or spontaneous. In the latter case the whole judgment remains elementary. Take, for instance, Lodge's own example, "The freight-trains passing over the bridge grow more troublesome every year" (*Modern Logic*, p. 12). No critical insight is required to formulate that judgment. Thus it follows that much of his second group of judgments would be excluded by his own criterion. Let us grant without examination that his symbolic and transcendent judgments may all be critical—a generous concession—still only a scant moiety of his book would escape slaughter. For we must remember that elementary judgments form the base of the logical pyramid, and the lower tiers are broader than the upper. Hence, even granting that less than half of his judgment-groups

must be excluded, the discard would exceed the matter retained. His criterion would rid logic not only of elementary judgments, but also of concepts and of many inferences. But even that does not tell the whole story. "Ideally, there is, for modern logic, only one judgment," and that one is, unfortunately, beyond the range of mortal minds. Exclusion is such a sharp tool, wielding it is such a fascinating exercise, that in the end all human judgments pass under the knife.

Of course Professor Lodge has reasons—two reasons at least—for his proposed exclusion. (a) "Naïve mental processes at the primary level are not *judgments* in any strict sense." (b) "Contact with reality represents, for modern logic, an ideal rather than an actual fact." As a consideration supplementary to these "two main grounds," he urges that "as there is now no common term (*Urtheil*) to connect us with the teachings of traditional logic, we are in a position to keep clear of a number of distressing confusions which have arisen from the lack of a sharp distinction." These confusions pertain especially to negative and hypothetical judgments. His interpretation of negatives and hypotheticals encounters stiff resistance on the part of elementary judgments, and that "distressing confusion" would vanish with the exclusion of the recalcitrant judgments. Is it not always possible to readjust our theories to fit the facts instead of banishing unwelcome facts?

As for the soundness of his "two main grounds," we find them somewhat lacking in cogency. To prove that elementary judgments are not judgments "in any strict sense," he cites the "modern acceptance of the second level of reflection," that level, namely, at which we begin to be critical instead of spontaneous. Now this acceptance may be construed in two senses, either as exclusive of the primary level or coordinate with that level. In the latter sense the critical stage is not destructive of the primary stage; logic may recognize both critical and spontaneous judgments. That is the way in which most logicians construe this acceptance. But Lodge construes it in the first sense and assumes that modern thought conforms to his thought.

His further development of this "second level of reflection" is unique. "We criticize the judgment itself. Is *A*, after all, *B*? Is not that merely our *opinion*?" Is that object truly a cow? It seems to be a cow. "So far as the evidence goes it would appear" to be a cow. But hold on there a moment before you accept "the evidence as far as it goes." For "we are only mediately, if at all, in touch with reality. All judgments are regarded as man-made, hypothetical, open to doubt." Alas for the poor deluded milkmaid fondly hoping to fill her pail from a hypothetical cow.

It is only by deftly enveloping them in metaphysical mist that doubt is cast on elementary judgments. We challenge the accuracy of the assumption that modern logic is committed to that sort of legerdemain. Its most eminent expounders, those able authors recognized by Lodge himself as his masters, do not reject elementary judgments; neither do they stigmatize them as not being judgments at all.

The second main ground for excluding elementary judgments from logic is formulated as follows: "Contact with reality represents, for modern logic, an ideal rather than an actual fact." This is also an assumption which is not quite self-evident. Its validity as an accurate picture of modern logic can hardly be accepted. Whether or not it strikes you or me as a welcome and congenial note, depends wholly on what brand of philosophy we affect. For it is at bottom a philosophical rather than a logical doctrine. Just how it serves to establish the desired conclusion that the whole group of elementary judgments ought to be excluded from logic, is not very clear. The implication seems to be that the elementary judgment is somehow to blame for the reality-contact situation, and deserves to be sent into the wilderness as a scapegoat.

Now in this matter of closeness or remoteness of contact with reality, metaphysics is always able to brew a host of doubts and confusions, but, fortunately, logic is not obliged to drink of that brew. The logician may not be able to say just how we get in touch with reality; or by what means we can best achieve that result, whether by spontaneous or critical thought; or just how close we ever get by any available method; but he has one sure token that we do somehow get at the real thing and know that it is verily there before us. "*The real compels our thought*" (Hibben's *Logic*, p. 30). It compels our thought because it is an item in the whole well-ordered and compact system of cosmic organization. Cosmic order compels alike your thought and mine and the thought of all mankind. All judgments "man-made"? Far from it. We just have to think thus and so as reality dictates. This compulsion, this external control, is an inherent and inalienable function of reality, a prerogative which nothing unreal can usurp. By that mark we can always distinguish the real from the dream, the illusion, the creation of fancy or imagination. We can banish the sham-real, annihilate it, clean it out of our thought by the exercise of reason and will as so much rubbish; but we can not annihilate the cow.

There is no royal road to knowledge of reality. It is achieved painfully, laboriously, step by step. Elementary judgments furnish the facts and critical judgments organize the facts into a coherent

system, a science. Logic proceeds by this method, just as the other sciences organize their special facts. It is by the harmonious combination and interplay of elementary and reflective judgments, not by thrusting the former out of doors, that the knowledge-process is invigorated and vitalized. The tree of knowledge is rooted in spontaneous judgments. How can we expect fruitage if the roots are severed?

Lack of spontaneity has been fatal to the old formal logic. We may well beware of a similar fate for modern logic if spontaneous judgments are excluded from it.

L. E. HICKS.

AUGUSTA, GA.

REVIEWS AND ABSTRACTS OF LITERATURE

An Introduction to Modern Logic: RUPERT CLENDON LODGE. Minneapolis: Perine Book Co. 1920. Pp. xiv + 361.

What is "modern logic"? Mr. Lodge announces it as "that body of logical theories and method which is usually associated with the names of Lotze, Sigwart, Bradley, Bosanquet, Wundt, Erdmann, and Dewey." This identifies it as the doctrine characteristic of a movement, not of a period. But what is it that the logical theories of Bosanquet and Dewey have in common—or did Mr. Lodge put in Dewey merely to make the conundrum more difficult? The reviewer (being prejudiced on the subject) thought he knew the answer: "Modern logic" is a new name for ancient dialectic. But this book makes him doubt. The splendid chiaroscuro of most contributions to "modern logic" but serves to accentuate the brilliant polemic. Here, however, all polemic is deliberately avoided, and the development is entirely constructive. Avoidance of the controversial is carried to the point of omitting all discussion of the relation of "modern logic" to the Aristotelian tradition and to the various developments of recent years which are neither Aristotelian nor "modern." "For all such omissions, as well as for what is included, the sole justification is the nature of an introductory treatise. It has seemed best to avoid polemics on the one hand, and an unmanageable multiplicity of hypotheses on the other, in favor of a certain singleness of purpose and organic unity of thought" (p. v.).

In this purpose to develop comprehensively the constructive theory of "modern logic," the author has admirably succeeded. The presentation marches. Compactness, explicitness, the constant use of illustration, and clarity in development are its outstanding features.